

ABSTRACT OF THE DISCLOSURE

A method of laser beam machining which has a simple construction and which is capable of suitably processing a part to be processed by means of laser beams is provided. A plurality of laser diode arrays 3 are stacked and disposed in such a manner as to allow radiation of laser beams in the direction of a width W of a part 1 to be processed. Each of the laser diode arrays 3 is controlled such that outputs 2R, 2L of laser beams with which the part 1 to be processed is irradiated in its width(W)-wise marginal portions 1R, 1L become higher than an output 2C of laser beams with which the part 1 to be processed is irradiated in its width(W)-wise central portion 1C. While the part 1 to be processed is irradiated with the laser beams with the distribution of energy thus changed, the laser beams are displaced relatively in the longitudinal direction of the part 1 to be processed.